Direct Dial: 020 7901 7333 Email: chris.watts@ofgem.gov.uk

19 December 2001

Dear Colleague,

## Draft of revised Regulatory Instructions and Guidance (RIGs)

Please find enclosed a draft version of the revised Regulatory Instructions and Guidance (RIGs).<sup>1</sup> This letter provides a summary of the changes we are proposing to make to the RIGs and responds to the comments made by companies in response to my 8 October letter, which asked for views on how the RIGs might be improved and comments on draft formulae for calculating the number and duration of interruptions. We have also addressed a number of areas of ambiguity, which were highlighted as part of the IIP interim review carried out by Mott MacDonald and British Power International.

Ofgem is proposing to make a number of changes to the RIGs to:

- improve their style and presentation;
- provide further guidance in a number of areas where the distribution businesses are seeking further clarification;
- remove inconsistencies; and
- introduce formulae for calculating the number and duration of interruptions to supply per year, the number of re-interruptions and the number of short-interruptions.

Appendix 1 sets out a summary of the main points raised in response to the 8 October letter and the review and Ofgem's response as reflected in the draft version of the revised RIGs.

This constitutes formal notice, in accordance with paragraph 9 of Standard Licence Condition 49 of the distribution licence of changes to the RIGs. We would welcome comments on the draft

<sup>&</sup>lt;sup>1</sup> It is also available on the Ofgem website www.ofgem.gov.uk.

version of the revised RIGs. Ofgem will then publish the final version of the revised RIGs in February 2002 in the light of these comments. Ofgem proposes that new version of the RIGs should take effect from April 2002. This process is consistent with the licence condition and the proposed changes.

Responses to the draft RIGs should be sent by 29 January 2002:

Chris Watts Ofgem 9 Millbank London SW1P 3GE

or on email at chris.watts@ofgem.gov.uk

If you have any questions about the content of this letter or the RIGs please contact Chris Watts on 020 7901 7333.

Yours sincerely

Chris Watts Project Manager – Quality of supply and reporting

## APPENDIX 1 Summary of responses to RIGs and proposed changes

Set out below is a summary of responses to some of the key issues that have been raised by distribution companies in response to the 8 October letter or identified as part of the interim review of output measures and Ofgem's views. Also highlighted are some of the other minor or presentational changes that have been made to the RIGs.

All paragraphs numbers in this appendix refer to the draft version of the revised RIGs.

## Section 1: Introduction

A number of presentational changes have been made to this section to reflect the fact that the document is a draft version of revised RIGs.

# Section 2: Detailed definitions, instructions and guidance for reporting the number and duration of interruptions to supply

A number of changes have been made to improve the clarity, drafting and presentation of this section.

## Issues raised by respondents to the 8th October letter or by the audit

#### General issues

1. Several companies suggested that the presentation of the section on the number and duration of interruptions to supply could be improved by general restructuring. In particular, they indicated that the definitions of incidents, interruptions, short interruptions and customers were distributed throughout the section and should be brought together.

Ofgem recognises that the presentation of section 2 of the RIGs can be improved by bringing together the definitions. Ofgem has restructured the section accordingly.

2. One company felt that the level of clarity would be improved if the terms "interruption" and "incident" were defined generically and additional terms "short interruption", "long interruption", "short incident" and "long incident" were introduced and defined.

Ofgem does not consider this change to be appropriate. It is clear that an interruption can only occur as part of an incident and that an incident is always greater than 3 minutes in duration.

## Key definitions (paragraph 2.3)

1. One company suggested that it would be useful to include the number of customers reinterrupted in the list of key definitions. It suggested that the definition should be:

#### the sum of the number of customers re-interrupted \* 100

The total number of customers

Ofgem has made this change as it improves clarity and consistency between the interruption measures

2. Several companies asked for clarification of whether the number of re-interruptions should be expressed per 100 customers.

The number of re-interruptions should be expressed per 100 customers for consistency with the other interruption measures.

## Customer (paragraph 2.5)

One company suggested that the guidance on customer numbers could be improved by stating that multiple (or secondary) MPANs should be discounted rather than ignored as this better reflects current practice.

Ofgem has made this change.

## Incident (paragraphs 2.9 to 2.12)

1. One company suggested the following rewording of occurrences classed as an incident to avoid circular definition:

"the pre-arranged isolation of any circuit or item of equipment energised at power system voltage;"

Ofgem has made this change.

2. One company suggested the following rewording of occurrences that would not count as an incident to avoid a circular definition:

"Failures and overloads on customers' equipment or another authorised electricity operator's system, which are cleared by the correct operation of our protection equipment at the interface, provided supplies to other of our customers are not affected; and

pre-arranged works affecting single customers for the purposes of meter changes, voltage standardisation, renewal of service cables and replacement suppliers' fuses etc."

Ofgem has made this change.

3. One company asked for clarification on the meaning of the phrase "customer effects should be calculated accordingly".

Ofgem recognises that the existing wording is not clear and has therefore rephrased this as "the number and duration of interruption and the number of re-interruptions should be calculated accordingly."

## Incident and restoration stage (paragraphs 2.9 to 2.12 and 2.35 to 2.37)

One company suggested that the definitions of interruptions and restoration stages are interchangeable. An interruption is a period of time when one or more customers is off supply and has a start and finish time – this is the same as a restoration stage.

Ofgem does not consider interruptions and restoration stages to be interchangeable. Customers' supplies will typically be restored in stages during an interruption. Not all customers will have their supplies restored at the same time. Additional customers may be interrupted in later restoration stages.

## Unplanned incident on the distribution system (paragraph 2.13)

One company put forward the following definition of an unplanned incident to improve clarity:

"an incident where statutory notification has been given to all customers affected at least 48 hours before the commencement of the earliest interruption (or such notice period of less than 48 hours where this has been agreed with the customer(s) involved).

A pre-arranged incident that requires a number of switching operations and involving an interruption to supply to customers can be regarded as a single incident provided that the interruption times are within the period stated on the notification provided to the customer."

## Ofgem has made this change.

# Incident start (paragraph 2.18 to 2.21)

A number of companies have identified inconsistencies in the definition of incident start and guidance on the date and time of an incident:

- a) The definition of an incident start states that that the start of an incident is the earlier of either the time customers experience an interruption to supply or when a company becomes aware through its SCADA system. However the additional guidance states that the date and time of an incident shall be based on the earliest report of the incident. This has been interpreted to be the time of the call received from the customer. This is inconsistent if a customer indicates an earlier time of loss of supply.
- b) The guidance indicates that, given the way an incident is defined, the date and time of an incident is always the same as the date and time of the first interruption. This is inconsistent with the way an incident is defined. An incident does not necessarily start with or even include any interruption to supply.

Ofgem recognises that there are inconsistencies in the current definition of incident start. The date and time of an incident should be the earlier of the date and time at which the <u>first report</u> of the incident is received or the relevant circuit is automatically, deliberately or otherwise disconnected. This may be before the first interruption occurs. Ofgem has redrafted the RIGs accordingly.

## Incident completion (paragraph 2.22 to 2.25)

- 1. There is currently an inconsistency in the definition of incident completion. Ofgem has redrafted the RIGs to make it clear that an incident is complete after all customers' supplies have been restored for 3 hours. Thereafter any re-interruption is to be treated as a new incident unless it involves the connection or disconnection of mobile generation or temporary connection equipment, in which case it should only be treated as a new incident after a period of 18 hours.
- 2. One company suggested that words "unless it is part of a fault sectionalising process due to the development of a damage fault" in the final paragraph of the definition of incident completion add unnecessary complexity. For clarity this phrase should be deleted.

Ofgem has made this change.

# Short interruptions (paragraph 2.27 to 2.32)

1. A number of companies have suggested that it not clear how many categories of short interruption they are required to report.

Ofgem has revised the drafting to make it clear that four types of short interruption should be separately identified, measured and reported.

2. A number of companies asked for clarification on whether they should report short interruption on LV systems and LV services.

Where companies make significant use of auto-reclosers and automatic switching at the LV level, the number of short interruption at this level should be included in the appropriate short interruption categories.

3. Several companies asked for clarification on whether short interruptions should be disaggregated by voltage level.

Ofgem does not require short interruptions to be disaggregated by voltage levels. Some additional text to clarify this point has also been introduced.

## Customers involved in a restoration stage (paragraph 2.40 to 2.46)

Clarification was sought on the definition of zero volts for counting interruptions. In particular, when an HV fuse blows there is the possibility of half the voltage appearing on only two LV phases.

For HV faults, if one HV phase becomes disconnected it should be considered that the whole circuit is disconnected. This is because the effect would be to reduce the voltage level to customers, which may mean that they do not receive a supply that is reliable enough for their needs.

## Distribution system (paragraph 2.47)

One company suggested that there should be a separate definition for distribution system rather than it being included as part of the definition of an unplanned incident. It suggested the following wording:

"The distribution system is as defined in the standard distribution licence. Transmission activities in Scotland encompass 132 kV electrical line and plant. References to reporting on 132 kV in the RIGs are not applicable to the two Scottish ex-PES distribution businesses."

Ofgem has made this change to improve clarity.

## Interruption sequences (paragraph 2.48)

Several companies have asked for clarification on reporting interruption sequences during a single incident, particularly those involving short interruptions. For example, how would Ofgem expect to see an incident reported where a group of customers experienced an interruption of greater than 3 minutes duration, were then restored for a period exceeding 3 minutes (but less than 3 hours) and then experienced a further interruptions of less than 3 minutes.

Ofgem recognises that an incident may include both a loss of supply of less than 3 minutes duration and a loss of supply of 3 minutes or longer. Ofgem proposes that under such circumstances the loss of supply of less than 3 minutes duration should be reported as a short interruption rather than a re-interruption and therefore not included in the calculation of the number and duration of interruptions to supply per year.

## Updating the connectivity model (paragraph 2.49)

One company asked for greater clarification on permanent changes to the connectivity model.

Ofgem has added an example to improve clarity.

## Disaggregation by "source" (paragraph 2.51)

A number of companies asked for clarification on whether the disaggregation of the number and duration of interruptions by "source") should be into 3 or 5 categories.

They should be disaggregated into 5 categories with incidents on other systems divided into incidents on NGC system or other transmission systems in Scotland, incidents on embedded generator's systems and other connected systems. A change has been made to the RIGs to emphasise that there should be 5 categories

# EHV and HV (paragraph 2.56 to 2.58)

1. One company considered that more explicit bullet point definitions of HV and EHV should be introduced.

Ofgem has made this change to improve clarity

2. A number of companies have suggested that 22 kV circuits should be included in EHV systems consistent with engineering recommendations G43/3.

Ofgem recognises that, in different circumstances, 22kV circuits can have characteristics which make them broadly comparable with 11kV or EHV circuits. On balance Ofgem considers that 22kV circuits have a similar role to 11kV circuits and therefore should be grouped together for reporting purposes. Ofgem has therefore retained the existing definition of EHV and HV systems in the RIGs.

## LV (paragraph 2.59 and 2.60)

A number of companies have noted that the existing definitions of LV and LV services in the RIGs overlap. The lower boundaries of both the LV system and LV services are defined as being distribution businesses' side terminals of the distribution business' own protective devices to customer (e.g. cut-out fuses). The following definition was suggested to remove this overlap:

"The upper boundary should be taken as the load side terminals of the protection equipment connected to the secondary side (low voltage) of distribution transformers. The lower boundary should be taken as the points of connection associated with LV services."

"the lower boundary should be taken as the points of connection associated with LV services."

Ofgem has made this change to remove the overlap in the definitions and improve consistency.

# LV services (paragraph 2.61)

1. Several companies also noted that LV services are not defined in the latest draft of the Electricity Supply Regulations. The following definition was suggested:

"the service line from the LV distributing main to the distribution business's protection device situated upon the customers' premises including the joint and associated components connecting the service line to the distributing main."

Ofgem has introduced this definition in the draft version of revised RIGs to improve clarity.

2. Several companies have asked what should be reported if an incident that occurs on a meter, time-switch or cut-out results in the operation of a fuse at the company's distribution substation and the interruption of other customers.

Ofgem consider that incidents on meters, time-switches and cut out fuse operations should be excluded from reporting under the IIP (even where this results in the operation of a fuse at the distribution company's substation.) However, the cut-outs themselves are generally regarded as part of the LV service. Ofgem therefore proposes that faults on cut-outs should be included in the calculation of the number and duration of interruptions relating of LV Services. The revised RIGs have been drafted accordingly.

# Disaggregation by HV circuit (paragraph 2.62)

Ofgem and it consultants are still working on the development of a model for normalising the number and duration of interruptions. Any data needed to populate the normalisation model will be asked for as part of a separate information request.

# Section 3: Definitions, instructions and guidance for reporting on speed and quality of telephone response

The speed of telephone response is an area where this is ongoing discussion about the most consistent way of measuring companies' performance. We have made a number of changes to reflect the responses to the 8 October letter areas of ambiguity highlighted by the IIP interim review. We have made some changes to improve the clarity and drafting of the section and to remove inconsistencies.

# Total calls received (paragraph 3.7)

A number of companies indicated that the words "on the specified lines" should be inserted after the words "which enters the company's telephony system.

Ofgem has made this change.

# Total calls answered (paragraph 3.7)

A number of companies indicated that the words "on the specified lines" should be inserted after the words "which enters the company's telephony system.

Ofgem has made this change.

## Response times (paragraph 3.7)

One company suggested that the response time would be better defined as "the amount of time that a customer has to wait for a response once their call has entered the distribution company's telephony system."

Ofgem has made this change and also added additional clarification to make it clear that the distribution company's telephony system includes systems operated by a service provider on behalf of the company.

# All lines busy (paragraph 3.8)

One company suggested that that the current measure for the all lines busy is inappropriate because it does not quantify the impact on customers. It suggested that the best measure would be to record the number of customers unable to receive a ringing tone.

Ofgem has contacted all the distribution companies to ask them whether they are able to measure the number of calls from customers which do not receive a ringing tone. The majority of companies have indicated that they will be able to measure this from April 2002. Ofgem therefore proposes that companies report the number of calls to the distribution business on the specified contact lines, which receive a busy tone (or equivalent). Ofgem will specify the average time that a customer listens to a busy tone in order to estimate the total time that customers experience busy lines. Where companies are unable to report this they should provide the total time their system is physically unable to take additional calls.

## "group announcements" (parapraph 3.10)

A number of companies have indicated that the length of the Data Protection Act notice should be excluded from the average telephone response time. They suggested that the length of the message would vary between companies depending on their interpretation of the Data Protection Act limiting any meaningful comparison of response data.

Ofgem accepts that the Data Protection Act notice should be excluded from the average telephone response time. It should be treated as part of the group announcement. Ofgem has drafted the revised RIGs accordingly.

# Touch-tone telephone facilities (paragraph 3.10)

One company suggested that the response time for calls answered using an IVR system should be measured from the time the call enters the distribution business' system to the start of the IVR process to ensure a fair comparison with calls answered by an agent. It suggested that after an agent has answered a call there will still be a questioning process before consumers receive the information they require.

Ofgem does not consider this change to be appropriate. A 15-second grace period is allowed for calls answered using an IVR system to ensure a fair comparison with calls being answered by an agent.

## Automated fault messages (paragraph 3.10)

One company suggested that the provision of a fault message should not count as a call answered if the customer then chooses to hold for additional information. In such cases the call should only count as answered once the agent has answered the call. Ofgem proposes that where customers hang up during or at the end of an automated fault message this should be treated as a call answered as customers have received the information they require. However, if customers choose to hold for an agent to obtain additional information then the call will only be treated as answered when the agent answers the call. i.e. the additional length of time taken till the agent answers the call should be counted as part of the response time as the customer has not yet received the information they require.

Companies should also separately report the number of calls where customers choose to hold for an agent but are disconnected before the agent answers the call. The proposed changes will help ensure that customers get a substantive response before their call is treated as answered. Ofgem has redrafted the RIGs accordingly.

## Section 4: Definitions, instructions and guidance for monitoring medium term performance

A number of changes have been made to improve the clarity, drafting and presentation of this section.

## Reliability (paragraph 4.6)

A number of companies noted an inconsistency between this paragraph, which explains that faults exclude incidents on other systems, and the tables showing the disaggregation of fault rates, which include faults on other systems.

Faults on other connected systems should be excluded.

## 132 kV, 66 kV and 33 kV circuits and equipment (paragraph 4.8)

A number of companies asked for clarification on whether the output required was a fault rate rather than the total number of faults.

Ofgem requires the fault rate rather than the total number of faults. The RIGs have been revised accordingly.

## Fault rates (paragraphs 4.8 and 4.9)

1. A number of companies asked for clarification on whether the output required was a fault rate rather than the total number of faults.

Ofgem requires the fault rate rather than the total number of faults. The RIGs have been revised accordingly

2. One company asked for clarification on the disaggregation of fault rates. For example, should all faults rates be disaggregated by damage, non-damage faults, by weather and environment, company causes and faulty manufactures etc.

Fault rates at 133kv, 66kv and 33kv should be disaggregated by overhead lines and underground cables. i.e. there should be a total of 9 trend lines including the total fault rate at each voltage level.

Faults on overhead line and underground cable at HV level should be disaggregated by weather and environment faults, company causes and faulty manufactures, unknown or unclassified causes and third-party faults. i.e. there should be 10 trends lines including the total fault rate for overhead lines and the total fault rate for underground cables. Any disaggregation between damage and non-damage faults is voluntary.

## Switchgear and protection systems (paragraph 4.11)

One company asked for further clarification on reporting fault rates on switchgear and protection systems. It had assumed that in calculating fault rates, all faults on switchgear (excluding pole-mounted/structure mounted fusegear, isolators and switch disconnectors) and protection systems at all voltages are to be aggregated in the numerator. It was not clear what should be included in the denominator.

This paragraph only relates to HV systems. All fault include on NaFIRS defined (or equivalent) pole-mounted automatic circuit breakers and automatic sectionalisers and all faults on (automatic or non-automatic) ground-mounted switchgear and protection and control equipment should be included in the numerator. The number of protection units should be excluded from the denominator.

## Section 4: Definitions, instructions and guidance for monitoring medium term performance

One minor change has been made to this section to reflect the fact that the revised RIGs will be published in February.

## Appendix 2: Formulae for the purposes of the scheme

Ofgem has introduced formulae for calculating the number and duration of interruptions to improve clarity and to ensure consistency with the IIP incentive scheme licence condition.

## Appendix 3: Other formula

Ofgem has introduced formulae for calculating the number of short interruptions and the number of re-interruptions to supply to improve clarity.